CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER No. 88-168
NPDES NO. CA0038148

RE-ISSUING WASTE DISCHARGE REQUIREMENTS FOR:

CITY OF MARTINEZ WATER TREATMENT PLANT
CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. The City of Martinez, hereinafter called the discharger, by application dated June 1, 1988, has applied for reissuance of waste discharge requirements and a permit to discharge wastes under the National Pollution Discharge Elimination System.

2. The discharger treats about four million gallons per day (mgd)of municipal water by coagulation, clarification, and filtration. Sludge is gravity thickened and then discharged to evaporation ponds. During wet weather, the ponds may become full, and the discharger has in the past discharged water from the ponds to prevent overflow. Discharge flowed via overflow weirs into an underground drainage system that drains into an unnamed watercourse at a point in the Shell Oil Company's Martinez Refinery, about 2500 feet east from its Pacheco Gate No. 2. The watercourse is tributary to Carquinez Strait, a water of the United States and the State, near Bull's Head.

3. The discharge is presently governed by Waste Discharge Requirements, Order No. 83-40, which allows discharge of up to 0.04 mgd into the Carquinez Straits.

4. The discharger has informed staff that a sludge press is being installed at the plant, and that the ponds will in the future be used when the press is out of service. Water recovered from the sludge press will be recycled through the plant.

5. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 16, 1986. The Basin Plan contains water quality objectives for Suisun Bay and contiguous water.

6. Effluent limits for aluminum, the primary constituent of concern in this discharge, are not contained in the Basin Plan. Recent Water Quality Criteria published by the Environmental Protection Agency pursuant to Section 304(a)(1) of the Clean Water Act suggests that concentrations of aluminum of up to 87 ppb in receiving waters should not

adversely affect freshwater aquatic organisms. Water quality criteria published pursuant to Section 304(a)(1) represent a non-regulatory, scientific assessment of ecological effects.

7. The beneficial uses of the Carquinez Strait and contiguous water bodies are:

    Contact and Non-contact Water Recreation
    Wildlife Habitat
    Preservation of Rare and Endangered Species
    Fish Migration and Spawning
    Industrial Service Supply
    Navigation
    Commercial and Sport Fishing

8. This Order serves as an NPDES permit, adoption of which is exempt from the provisions of Chapter 3 commencing with Section 21000 of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.

9. The discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the discharge and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations.

10. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. Discharge in excess of 0.04 mgd is prohibited.

2. No sludge shall be discharged into watercourses or waters of the state.

3. Discharge from the ponds to watercourses or waters of the state after May 30, 1989 is hereby prohibited.

B. Effluent Limitations

1. The waste shall be limited to wastewaters that are associated with the accumulation of rainwater on the sludge disposal ponds, and no additional pollutants shall be added.

2. The waste discharge shall not exceed the following limits:

Constituents	Units	Monthly Average	Maximum Daily	Instant. Maximum
a. Total Suspended Solids	mg/l	30	45	---
b. Chlorine Residual	mg/l	--	--	0.0
c. Settleable Matter	ml/l/hr	--	--	0.5
d. Aluminum (1)	ug/l			500

(1) Limit based upon current achievable treatment.

3. The pH of the discharge shall not exceed 9.0 nor be less than 6.0

4. TOXICITY The survival of test organisms acceptable to the Executive Officer in 96-hour bioassays of the effluent shall achieve a 90 percentile value of not less than 50% survival based upon the ten most recent consecutive samples.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam.

   b. Bottom deposits or aquatic growth.

   c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels.

   d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;

   e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife or waterfowl, or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste will not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:

a. Dissolved Oxygen

7.0 mg/l minimum. Median of any three consecutive months shall not be less than 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.

b. Dissolved Sulfide

0.1 mg/l maximum

c. pH

Variation from natural ambient pH by more than 0.2 pH units.

d. Un-ionized ammonia

0.025 mg.l as N Annual Median
0.4 mg/l as N maximum

3. The discharger shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. Where concentration limitations in ug/l or mg/l are contained in this permit, the following mass emission limitation shall apply:

Mass Emission Limit in lbs/day = Concentration Limit in mg/l x 8.34 x Actual Flow in mgd averaged over the time interval to which the limit applies.

2. The discharger shall comply immediately with all sections of this Order.

3. The discharger shall comply with the self-monitoring program as adopted by the Board.

4. The discharger shall comply with all items except B.2, B.3 and C.11 of the attached "Standard Provisions, Reporting Requirements and Definitions" dated December, 1986.

5. This Order shall serve as a National Pollution Discharge Elimination Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after the date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by The California Regional Water Quality Control Board, San Francisco Bay Region, on December 21, 1988.

Steven R. Ritchie
Executive Officer

Attachments:

1) Standard Provisions and Reporting Requirements, December, 1986
2) Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

CITY OF MARTINEZ

CONTRA COSTA COUNTY

NPDES NO. CA0038148

ORDER NO. 88-168

CONSISTS OF

PART A, DATED DECEMBER, 1986

AND

PART B

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER No. 88-168
SELF MONITORING PROGRAM, PART B, FOR:

CITY OF MARTINEZ
CONTRA COSTA COUNTY

I. DESCRIPTION OF SAMPLING STATIONS

A. EVAPORTATION PONDS

Station

EP-001 through EP-004	At points within the evaporation ponds representative of the water in the ponds.

B. EFFLUENT

Station

E-001 through E-004	At a point in the discharge stream from evaporation ponds 1 through 4.

C. LAND OBSERVATIONS

Station

P-1 through P-n	At points along the periphery of the sludge disposal site at 25 foot intervals.

II. SCHEDULE OF SAMPLING AND ANALYSIS

The schedule of sampling and analysis shall be that given as Table 1.

III. MODIFICATIONS OF PART A

A. Ommitted: Sections D.1,3,4,5; E.1,3,4.

B. Self-Monitoring reports shall be submitted monthly after discharge commences.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharger requirements established in Regional Board Order No. 88-168.

2. Was adopted by the Board on December 21, 1988.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or written request from the discharger, and revisions will be ordered by the Executive Officer or Regional Board.

Steven R. Ritchie
Executive Officer

Effective Date 12/21/88

Attachments: Table 1

TABLE I

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSES

SAMPLING STATIONS	EP-001 thru EP-004	E-001 thru 004	P						
TYPE OF SAMPLES	G	G[3]							
Flow rate gals/day		E							
Chlorine Residual mg/l & kg/day	E								
Settleable Matter ml/l-hr	E	E							
Total Suspended Solids mg/l & kg/d	E[1]								
pH	E								
Aluminum, dissolved mg/l	E[1]								
Observations	E[2]		M[4]						

(1) If ponded rainwater from more than one pond is discharged simultaneously, the grab samples from each pond may be composited in proportion to their estimated discharge rates. The results may be reported as applying to each discharge.

(2) Determine freeboard before and after discharge.

(3) Effluent grab samples shall be collected immediately prior to cessation of discharge.

(4) Land disposal sites should be inspected for evidence of leaching during the wet weather period.,

LEGEND FOR TABLE

STATIONS

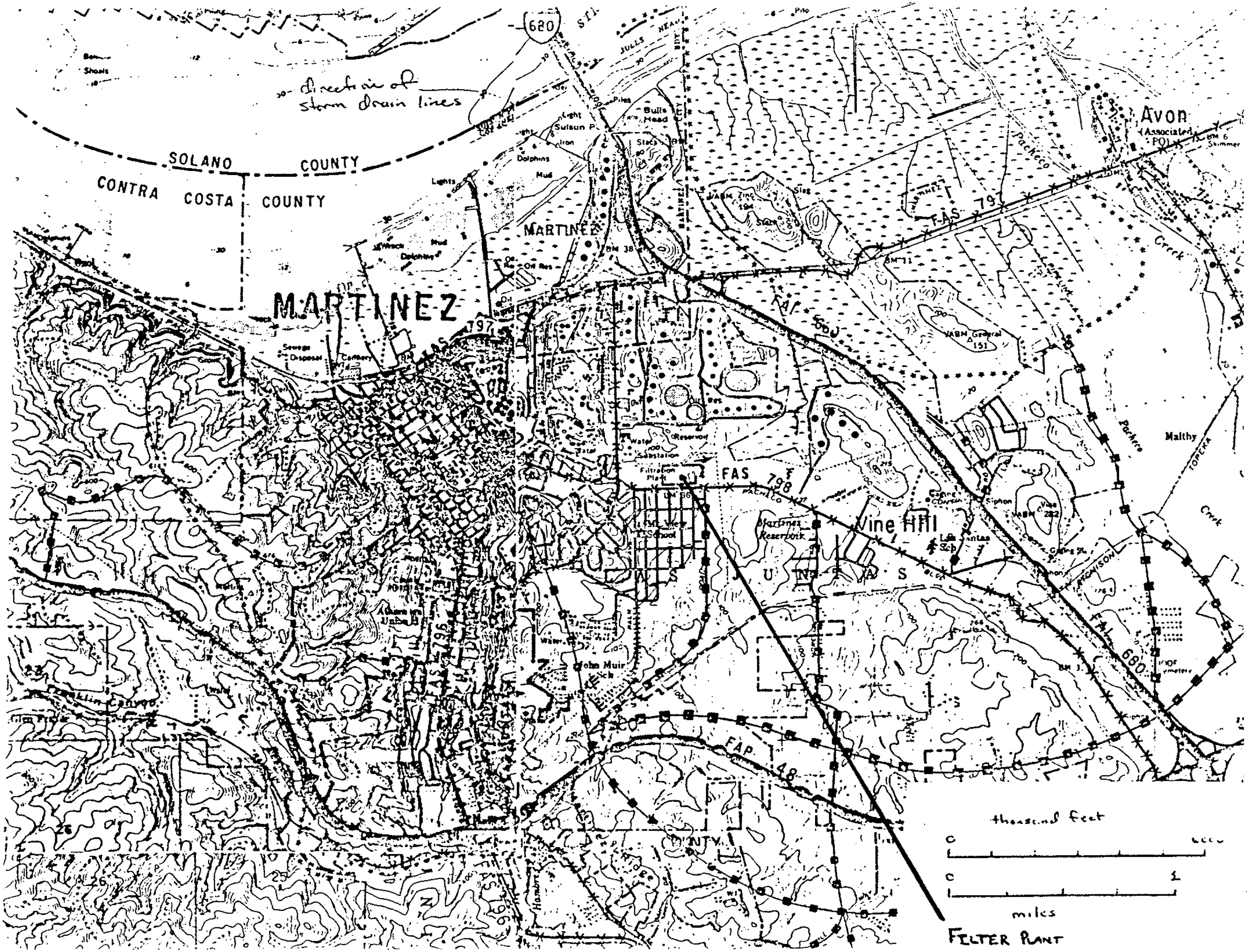
EP = evaporation pond
E = effluent from evaporation pond

TYPES OF SAMPLES

G = grab sample

SAMPLING FREQUENCY

E = each discharge occurrence
M = monthly


direction of
storm drain lines
SOLANO COUNTY
CONTRA COSTA COUNTY
MARTINEZ
Avon
Vine Hill
FAS 797
FAS 798
FAS 796
FAP 48
FAI 680
620
Pacheco Creek
Franklin Canyon
Filtration Plant
Reservoir
Martinez Reservoir
John Muir Sch
Sewage Disposal
Dolphins
Mud
Bulls Head
Suisun Pt
Malthy
Topeka
thousand feet
0
miles
0
1
FILTER PLANT